## **UNAIZA AHSAN**

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# RESEARCH INTERESTS

Video Recognition, Semi-Supervised Learning, Transfer Learning, Complex Event Recognition, Few-shot Learning, Action Recognition

## **EDUCATION**

Georgia Institute of Technology, Atlanta, GA

PhD Computer Science, 2012-2018

GPA 3.76/4.0

Dissertation: Leveraging Mid-Level Representations For Complex Activity Recognition Committee: Dr. Irfan Essa (Ph.D. Advisor), Dr. James Hays, Dr. Devi Parikh, Dr. Munmun De Choudhury, Dr. Zsolt Kira and Dr. Chen Sun

NED University of Engineering and Technology, Karachi, Pakistan Masters of Engineering in Computer and Information Systems, 2009-2012  $\bf GPA~3.95/4.0$ 

NED University of Engineering and Technology, Karachi, Pakistan Bachelor of Engineering in Telecommunications, 2005-2009 **GPA 89.6/100** 

#### **SKILLS**

# Research & Programming

- Deep learning methods and tools such as Caffe and Torch
- Computer Vision and Machine learning methods
- Python, OpenCV, MATLAB, R, Caffe and Torch

#### Courses Taken

- CVL Vision and Language (CS 8803)
- Design and Analysis of Algorithms (CS 6505)
- Computer Vision (CS 7495)
- Machine Learning (CS 7641)
- Numerical Linear Algebra (CS 6643)
- Social Computing (CS 8803)

## **EXPERIENCE**

Georgia Institute of Technology, Atlanta, GA, 2012-2018 Graduate Research Assistant

Data Science for Social Good 2016, Atlanta, GA Summer 2016

Developed a web app to determine optimal locations
for refugee resettlement in Atlanta

Georgia Institute of Technology, Atlanta, GA Fall 2012, Summer 2016 Teaching Assistant: Computer Vision CS4495, Computational Photography CS 4475

# **PUBLICATIONS**

- Unaiza Ahsan, Rishi Madhok and Irfan Essa, Video Jigsaw: Unsupervised Learning of Spatiotemporal Context for Video Action Recognition, IEEE Winter Conference on Applications of Computer Vision (WACV) 2019.
- Unaiza Ahsan, Chen Sun and Irfan Essa, DiscrimNet: Semi-Supervised Action Recognition from Videos using Generative Adversarial Networks, In Proceedings of the IEEE Conference on Computer Vision and Pattern Recognition Workshops 'Women in Computer Vision (WiCV)', 2017.
- Unaiza Ahsan, Munmun De Choudhury and Irfan Essa, Towards Using Visual Attributes to Infer Image Sentiment Of Social Events, In Proceedings of the 2017 International Joint Conference on Neural Networks (IJCNN) 2017.

- Unaiza Ahsan, Chen Sun, James Hays and Irfan Essa, Complex Event Recognition from Images with Few Training Examples, IEEE Winter Conference on Applications of Computer Vision (WACV) 2017.
- Unaiza Ahsan, Oleksandra Sopova, Wes Stayton, Bistra Dilkina, *Interactive tool to prioritize housing options for refugee resettlement* Bloomberg Data for Good Exchange 2016.
- Unaiza Ahsan and Irfan Essa, Clustering social event images using kernel canonical correlation analysis, IEEE Conference on Computer Vision and Pattern Recognition Workshops 2014.
- Unaiza Ahsan, SA Sattar, Humera Noor and Munzir Zafar, *Multi-cue object detection and tracking for security in complex environments*, SPIE Defense, Security, and Sensing 2012.

## HONORS

- Receipient of Schlumberger Faculty for the Future Fellowship 2014-present
- GRE General score of 1510 (800Q, 710V), 2012
- IELTS band score of 7.5, 2009
- Ranked 6th out of 50 students in undergraduate studies, 2008

## **HOBBIES**

Blogging, Writing Poetry